



Launch Mission Execution Forecast

Mission: Falcon 9 Starlink v1.0-L12

Issued: 14 Sep 2020 / 0930L (1330Z)

Valid: 17 Sep 2020 / 1407 – 1428L (1807 – 1828Z)



Forecast Discussion: Tropical Storm Sally is currently in the northeastern Gulf of Mexico and will continue to strengthen while slowly churning towards the northwest. The track, strength, and expanse of Sally will be a significant influence on Central Florida's weather for the next several days. Today, winds will remain from the southeast, bringing showers to the Space Coast. Sally is forecast to become a hurricane and make landfall very late Tuesday along the Louisiana / Mississippi border. Locally, winds will become more southerly, lessening the chances for showers over the Spaceport. The remnants of Sally will turn towards the east and move slowly through central Alabama and Georgia Wednesday and Thursday, bringing significant clouds and moisture into northern Florida. This will also have the effect of switching the Spaceport winds southwesterly, increasing the chances for afternoon and evening showers and thunderstorms. The primary launch weather concerns for a Thursday afternoon attempt are the Cumulus and Anvil cloud rules associated with the afternoon convection and the added moisture and instability from Sally.

On Friday, the remnants of Sally will approach the Atlantic coast while its associated moisture will drop into Central Florida. This will increase the chances of inclement weather over the Spaceport. The primary launch weather concerns for a Friday attempt remain the Cumulus and Anvil Cloud Rules, with the addition of the Thick Cloud Layers Rule.

Launch Day	Probability of Violating Weather Constraints					
	40%	Primary Concerns: Cumulus Cloud Rule, Anvil Cloud Rules				
	Weather Conditions				Additional Risk Criteria	
	Weather/Visibility:	Isold Showers / 7 mi.	Clouds			Upper-Level Wind Shear: Low
	Temp/Humidity:	84°F / 72%	Type	Coverage	Base (ft)	Tops (ft)
24-Hour Delay	Liftoff Winds (200'):	180° 10 - 15 mph	Cumulus	Scattered	3,000	12,000
			Cirrostratus	Scattered	22,000	25,000
						Booster Recovery Weather: Moderate
						Solar Activity: Low
	Probability of Violating Weather Constraints					
	60%	Primary Concerns: Cumulus Cloud Rule, Anvil Cloud Rules, Thick Cloud Layers Rule				
	Weather Conditions				Additional Risk Criteria	
	Weather/Visibility:	Isold T-Storms / 7 mi.	Clouds			Upper-Level Wind Shear: Low
	Temp/Humidity:	86°F / 70%	Type	Coverage	Base (ft)	Tops (ft)
	Liftoff Winds (200'):	200° 10 - 15 mph	Cumulus	Scattered	3,000	12,000
			Cirrostratus	Broken	20,000	25,000
						Booster Recovery Weather: Moderate
						Solar Activity: Low

Note: The Probability of Violation (POV) is the chance that a Lightning Launch Commit Criteria (LLCC) or certain user constraints (surface winds, precipitation, and temperatures, etc.) will be violated during the launch window. It does not take into account upper-level wind shear, booster recovery weather, and solar activity.

Next Forecast Will Be Issued 15 Sep 2020